

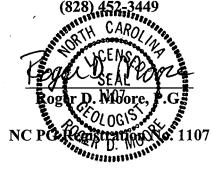
UNDERGROUND STORAGE TANK CLOSURE REPORT PRESNELL'S EXXON LAKE JUNALUSKA, NC **AES PROJECT #1108.01**

Prepared For:

Mr. Dwight Presnell P.O. Box 504 Lake Junaluska, NC

Prepared By:

Alpha Environmental Sciences, Inc. 367 Dellwood Road, Building A, Suite 2 Post Office Box 31 Waynesville, NC 28786



April, 2001

PROFESSIONAL ENVIRONMENTAL CONSULTING

Engineering Services Provided by Alpha Engineering Services, PA



April 3, 2001

Mr. Dwight Presnell P.O. Box 504 Lake Junaluska, NC 28745

RE: Underground Storage Tank Closure Report for Presnell's Exxon, Lake Junaluska, North Carolina - AES Project #1108.01

Dear Mr. Presnell:

Attached, please find the Underground Storage Tank Closure Report for the UST's at the above referenced site. This report has been prepared in general accordance with NC DENR-DWM Underground Storage Tank section guidelines. The UST Site Investigation (GW/UST-2) Report is included in the appendix of this report

Alpha Environmental Sciences, Inc. appreciates the opportunity to be of service. If you have any questions or need additional information, please do not hesitate to contact us.

Respectfully submitted,

Alpha Environmental Sciences, Inc.

E. Baker Jordan

Environmental Technician

Roger D. Moore, P.G.

Kogen D. Moon

Professional Geologist/Division Manager

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Appendix A Site Investigation Report (GW/UST-2)

Appendix B Chain of Custody Record

Appendix C Laboratory Results

A. General Information

1. UST Owner

Mr. Dwight Presnell P. O. Box 504 Lake Junaluska, NC 28745 (828) 452-5896

2. Contacts

Primary Contact
Presnell's Exxon
Mr. Dwight Presnell
20 Old Clyde Road
Lake Junaluska, North Carolina 28745,
(828) 452-5896

Primary Consultant

Alpha Environmental Sciences, Inc. Post Office Box 31 Waynesville, NC 28786 (828) 452-3449

Laboratory

Environmental Sciences, Inc. 12065 Lebanon Road Mt. Juliet, TN 37122 (615) 758-5858

3. UST Information

| Tank | Install Date | Removal/ Closure Date | Size in Gallons | Tank Dimensions | Last Known Contents |
|------|--------------|--------------------------|--------------------|--------------------|------------------------|
| 1 | Unknown | 7/97 | 3000 | 64" x18' | Gasoline |
| 2 | Unknown | · 7/97 | 3000 | 64" x18' | Gasoline |
| 3 | Unknown | 7/97 | 3000 | 64" x18' | Gasoline |
| 4 | Unknown | 7/97 | 3000 | 64" x18' | Gasoline |
| 5 | Unknown | 7/97 | 1000 | 64" x 72" | Diesel |
| 6 | Unknown | 3/23/01 | 550 | 46" x 74" | Waste Oil Tank |
| 7 | Unknown | 3/23/01 | 550 | 46" x 74" | Waste Oil Tank |
| 8 | Unknown | 3/23/01 | 550 | 46" x 74" | Waste Oil Tank |

4. Site Characteristics

The site is located at 20 Old Clyde Road in Lake Junaluska, North Carolina, near the intersection with NC 209. The site is located in a commercial and residential area. The gasoline tanks were located in the front of the filling station and the diesel tank was located along the west corner of the station. These tanks were removed July 1997. The waste oil tanks were closed in place on March 23, 2001 by the owner and are located in the rear of the station. The waste oil tanks were pumped of any remaining petroleum and filled with clean sand. Specific information regarding the closure by removal in 1997 is not known.

The site geology generally consists of alluvial soils from the unnamed tributary to Richland Creek which is piped under the site. Near surface soils also contain fill of varying thickness.

A surrounding well survey has not been completed for the site.

B. Closure Procedures

Alpha Environmental Sciences, Inc. has not been provided with any information regarding the closure procedures for the closure which occurred in 1997.

C. Site Investigation

- 1. No field screening was performed for this investigation.
- 2. Alpha Environmental Sciences, Inc. was contracted to perform the UST closure assessment for the tanks which were removed in 1997 and the waste oil tanks which were closed in place by the owner. A total of two (2) soil samples were collected from two (2) feet below each end of each gasoline tank. Two (2) samples were collected from the gasoline pump island and one (1) sample from the diesel pump island approximately two (2) to three (3) feet below grade. A sample was collected from each end of the diesel tank pit at approximately two (2) feet below the former base of the tank pit. A total of five (5) samples were collected from each end of the waste oil tanks at approximately two (2) feet below each tank. The grab samples were collected using disposable latex gloves, placed in EPA approved soil sample containers, and placed in an ice-filled cooler on site for transportation to Environmental Sciences Corporation laboratories. A chain-of-custody was completed and the samples were shipped to ESC laboratories for testing in accordance with EPA approved methods for soil analysis. The analyses for the collected samples were performed in accordance with "Guidelines for Tank Closure, North

Carolina Underground Storage Tank Section", NC DENR-Division of Waste Management-UST Section document dated December 2000. Results of the analytical testing are attached in the appendices of this report. Tabulated results are shown in Tables 1 and 2.

- 3. No groundwater sampling was performed.
- 4. Quality Control Measures The soil samples were collected from the base of the former UST excavation using direct push soil sampling methods. All probing equipment was decontaminated between each sample location. The collected soil was placed in EPA approved soil sample jars and then placed in an ice-filled cooler on site for transport to the analytical laboratory. A chain-of-custody was maintained during shipment by Federal Express to the lab. Samples were obtained on 3/13/01 and were immediately shipped to the laboratory.
- 5. Sample Results The soil samples were analyzed according to the last contents of the tank. The laboratory results of the soil samples are summarized in the tables attached to this report. The laboratory data sheets are attached in the appendices of the report.

D. Conclusions and Recommendations

Based on the results of the analytical testing performed on samples collected from the former underground storage tank pits and dispenser islands as well as surrounding the existing waste oil tanks, it appears that a release of petroleum product has occurred. The release appears to be likely from overfilling and spillage due to poor handling of product in the area of the gasoline underground storage tanks. Samples collected from beneath the dispenser island for the gasoline dispensers showed no detectable petroleum hydrocarbon contamination. A low level spill has also occurred related to the diesel tank, again, likely due to overfilling or possibly a small line leak. Samples collected for the waste oil tanks show no detectable petroleum hydrocarbons. This area appears to be free of waste oil contamination; however, the chromium level in sample S-18 exceeds the Maximum Soil Contamination Concentration for soil to groundwater levels. This may be a natural level, however, and just be elevated due to the alluvial soils encountered.

Chromium?

Based on our findings, additional assessment work to determine the extent of contamination may be required by the Asheville Regional Office of NC DENR-Division of Waste Management-UST Section. A copy of this report should be submitted to the Asheville Regional Office for completion of the tank closure procedures. The Asheville Regional Office of NC DENR will then direct further activities related to assessment at the site.

overfills phobable dispenses OK dresses spill probable overfully

E. Signature of Licensed Geologist



SECTION F FIGURES

FIGURE 1 USGS TOPOGRAPHIC MAP

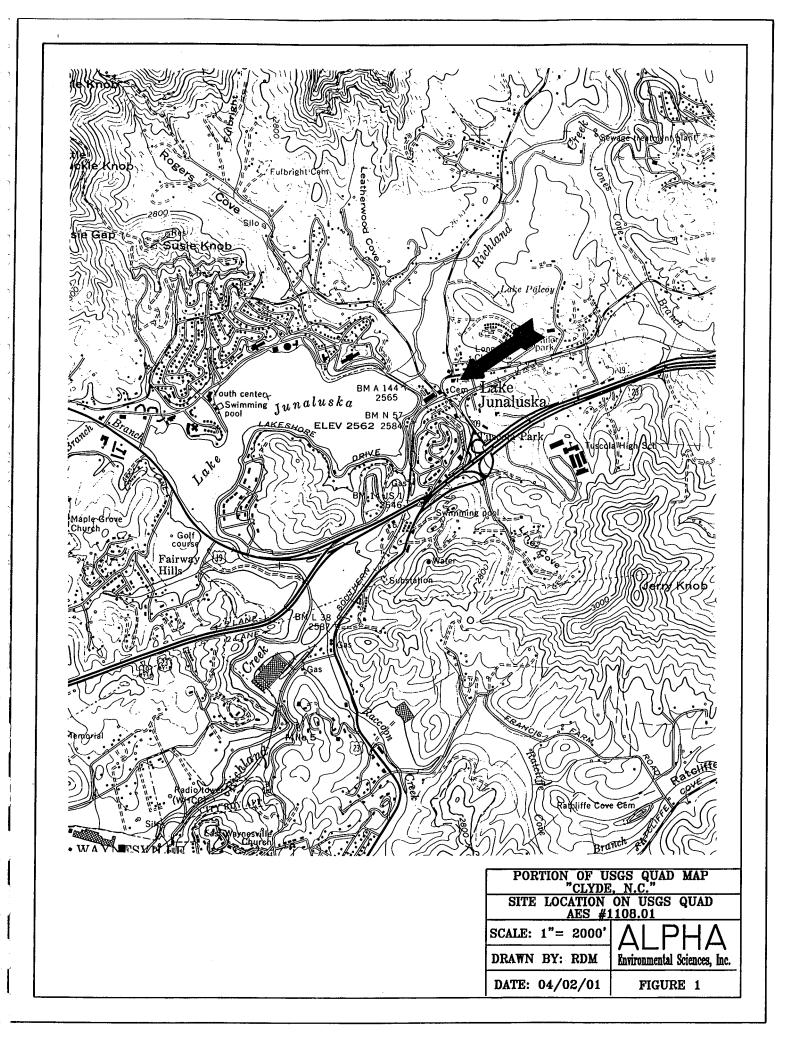
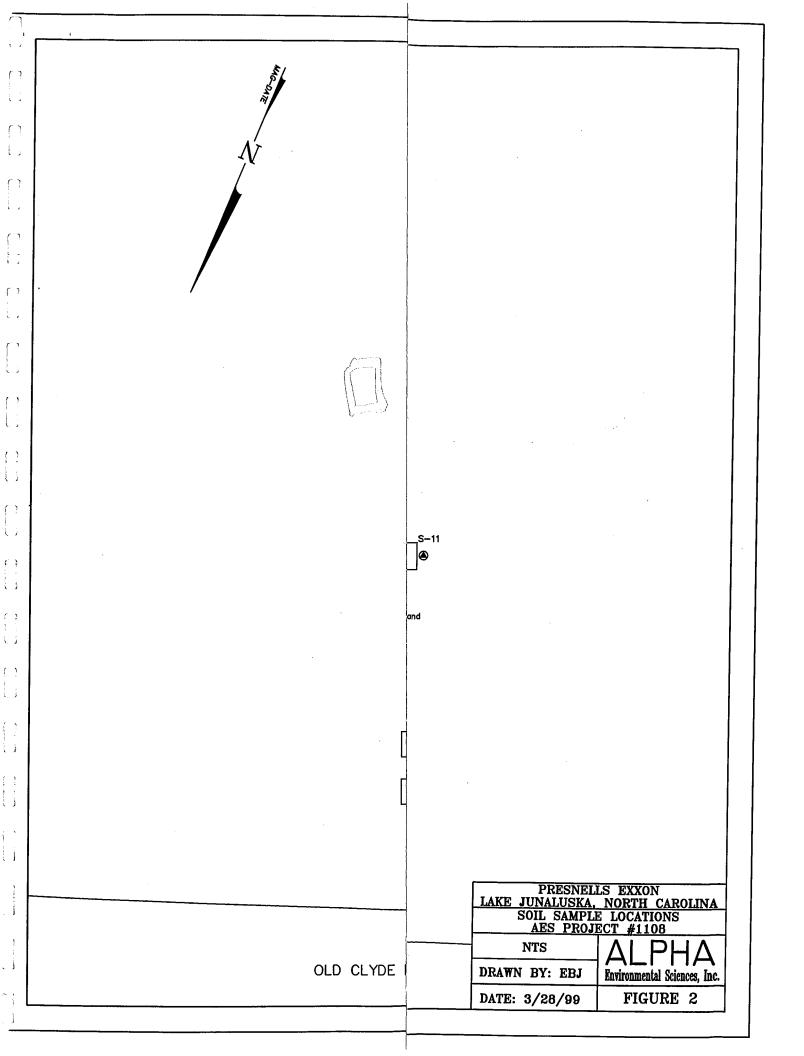


FIGURE 2 SOIL SAMPLE LOCATION DIAGRAM



SECTION G TABLES

TABLE 1
PRESNELL'S EXXON STATION

Soil Analytical Results EPA 8015 GRO/DRO AES Project #1108.01

(Results reported in parts per million)

| Sample # | Location | Depth (ft.) | Gasoline Range | Diesel Range |
|----------|--------------------|-------------|----------------|--------------|
| S-1 | Gasoline Tank | 8-10 | 8.4 | N/A |
| S-2 | Gasoline Tank | 8-10 | (3) 37.0 | N/A |
| S-3 | Gasoline Tank | 8-10 | () 150.0 | N/A |
| S-4 | Gasoline Tank | 8-10 | 17.0 | N/A |
| S-5 | Gasoline Tank | 8-10 | 870,0 | N/A |
| S-6 | Gasoline Tank | 8-10 | 60.0 | N/A |
| S-7 | Gasoline Tank | 8-10 | 200.0 | N/A |
| S-8 | Gasoline Tank | 8-10 | BDL | N/A |
| S-9 | Gasoline Dispenser | 2-3 | BDL | N/A |
| S-10 | Gasoline Dispenser | 2-3 | BDL | N/A |
| S-11 | Diesel Tank | 6-8 | 170 | 24 |
| S-12 | Diesel Tank | 6-8 | 25 | 21 |
| S-13 | Diesel Dispenser | 0-2 | BDL | 24 |

Notes: BDL = Below Detection Limits

TABLE 2

PRESNELL'S EXXON STATION

Soil Analytical Results Waste Oil Tanks AES Project #1108.01

(Results reported in parts per million)

| Sample # | Depth (ft.) | Gasoline Range | Diesel Range | Chromium | Lead |
|----------|-------------|----------------|--------------|----------|------|
| S-14 | 8-10 | BDL | BDL | 26 | 11 |
| S-15 | 8-10 | BDL | BDL | 12 | 7.9 |
| S-16 | 8-10 | BDL | BDL | 12 | 7.2 |
| S-17 | 8-10 | BDL | BDL | 17 | 8.2 |
| S-18 | 8-10 | BDL | BDL | 65 | 12 |

BDL = Below Detection Limits

2. 1

SECTION H APPENDICES

APPENDIX A

SITE INVESTIGATION REPORT (GW/UST-2)

| GW/UST-2 Site Investigation Report For Permanent Closure or Change-in-Service of U.S.T. | | | | | | | | | | |
|--|--|--|--------------------------------|-------------|------------|---|-----------|-----------------------------|----------------------------------|---|
| FOR TANKS IN IN [SEE MAP ON REVERSE SIDE OF OWNER'S COPY (PINK)] OFFICE ADDRESS]. | | | | | | ity of the facility's location. I.D. Num | | | e Use Only Number Received | |
| | | | | | RUCTIO | | | | | |
| | | Our exchin of Tank | Complete and return within | (30) day | ys follow | ing com | oletion (| | | of Tank(a) |
| Ours | I. Ownership of Tank(s) Owner Name: Mr. Dwight Presnell PAGE 1 OF 2 Facility Name: Presnell's Exxon | | | | | | | | | |
| Corpora | tion, Individual, P | ublic Agency, or Other Entity) | | | - - | Facility Name: Presnell's Exxon (or Company) | | | | |
| | | | oad, P. O. Box 50 | <u>)4</u> | - - | | | (if available | | -3- D3 |
| Count | | aywood County | 00745 | | - - | Street Address 20 Ol.d Clyde Road (or State Road) | | | | |
| | | | Zip Code; 28745 | | - - | | | aywood | - | kake Junalzskoode: 28745 |
| Telep | hone Number | : (828) 452-5 (Area Code) | 5896 | | - - | Telep | hone N | اumber: (گ A) | rea Code) | 452-5896 |
| | | | | III. Co | ntact P | erson | | | | |
| Name | Mr. D | wight Presnell | Job Title: | Owne | r | | | | | Tel. No. : 828-452-5896 |
| Closure | Contractor: | | Address: | | | | | | | Tel. No. : |
| Priman | / Consultant: | Alpha Env. Sci | Inc. Address:] | PO Ro | x 31 | . Way | nesv: | ille, N | IC 2878 | 36 Tel. No. : 828-452-3449 |
| Lab: F | nvironme | ental Science | Corp. Address: | 12065 | Leba | non. | Rd,_I | <u>Mt Jul</u> | liet, 1 | IN 3710000:615-758-5858 |
| | 3 | V. U.S.T. Informatio | on | | V. Exc | avation | | | Odor or | VI. Additional Information Required |
| Tank No. | Size in Gallons | Tank Dimensions | Last Contents | | avation | Fre Prod Yes | | | Contamination No | See reverse side of pink copy (owner's copy) for additional |
| 140. | | | Contents | Tes | No | res | NO | 168 | 140 | information required by |
| <u>1</u> | 3000 | 64''x18' | Gasoline | | | | | | | N.C. ~ DWQ in the written report and sketch. |
| 2 | 3000 | 64"x18" | Gasoline | | | | | | | NOTE: If a release from the |
| 3 | 3000 | 64"x18" | Gasoline | | | | | | | tank(s) has occurred, the site |
| 4. | 3000 | 64"x18" | Gasoline | 1 | | | | | | assessment portion of the tank closure must be conducted under |
| 5 | 1.000 | 64"x72" | Diesel | | | | | | | the supervision of a P.E. or L.G., with all closure site assessment |
| | | | 220002 | | | | | | | reports bearing the signature and seal of the P.E. or L.G. |
| | | | VII. Check Lis | t (Chec | k the a | l ctivitie | s com | pleted) | | coardinor .E. or E.a. |
| DEC | MANEAT O | OCURE /For Removin | | | | | | | | |
| | | al fire marshal. | ng or Abandoning-in-place | 1 | | | | | | · |
| | Notify DWC | Regional Office before sh piping into tank. | abandonment. | | | AJ C | | NMENT IN | | erflows tank opening. |
| | Remove all | product and residuals | from tank. | | | = | □ Plu | ig or cap al | I openings | • |
| | Clean and i | own to tank. Inspect tank. | | | | | | sconnect ar lid inert ma | terial used | emove vent line. - specify: |
| <u> </u> | submersible | e pumps and other tank | | onnectio | ns, | | AVOME | .1 | | |
| | Cap or plug all lines except the vent and fill lines. Purge tank of all product & flammable vapors. REMOVAL Create vent hole. | | | | | | | | | |
| | Cut one or more large holes in the tanks. | | | | | | | | ved manner. | |
| Backfill the area. Dispose of tank in approved manner. Final tank destination: Dispose of tank in approved manner. | | | | | | | | | | |
| | | | | | | | | | | |
| VIII. Certification (Read and Sign) | | | | | | | | | | |
| I certify under penalty of law that I have personally examined and am familiar with the information submitted in this and all attached documents, and that based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the submitted information is true, accurate, and complete. | | | | | | | | | | |
| Print na | me and offici | al title of owner or owne | er's authorized representative | Э | | Signa | ture | let f | usn | Plate Signed 4 - 4 - 2001 |
| OW/// I | CT 2 /Day | 40/06) | 14/14/ | | ·········· | | <i>-</i> | 2 | 200 | |

GW/UST-2 (Rev. 10/96)

White Copy - Regional Office

Yellow Copy - Central Office

Pink Copy - Owner

| GV | //UST-2 | Site | Investigation Rep | ort F | or Pe | ermar | ent C | Closure | or Ch | ange-in-Service of U.S.T. | | |
|---|---|---------------------------|--|------------|--------------|--------------------------------|-------------------------------|--------------------------------|--------------------|--|--|--|
| FOR TANKS IN Return Completed Form To: The appropriate DWQ Regional Office according to the county of the facility's location. [SEE MAP ON REVERSE SIDE OF OWNER'S COPY (PINK) FOR REGIONAL OFFICE ADDRESS]. | | | | | | | I.D. N | Use Only Number Received | | | | |
| | | | | | RUCTIO | | | | | | | |
| | | 1 Commention of Toront | Complete and return within | (30) day: | s follow | ring com | oletion o | | | | | |
| | | I. Ownership of Tan | | | | | | | Location | of Tank(s) | | |
| Owner Name: Mr. Dwight Presnell PAGE 2 OF 2 Corporation, Individual, Public Agency, or Other Entity) | | | | | 2 - | Facility Name: (or Company) | | | | | | |
| Street | Street Address: 20 Old Clyde Road, PO Pox 504 | | | | | | Facility ID # (if available): | | | | | |
| Count | y: Ha | ywood | ······································ | | - | Street Address (or State Road) | | | | | | |
| ₫ij k | <u>e Junal</u> | uska State: NC | Zip Code: 28745 | | _ | Coun | | | City | Zip Code: | | |
| Telepl | none Numbe | | ?-5896 | | - | Telep | hone N | umber: (| | | | |
| | | (Area Code) | | III. Cor | tact F | Person | | (Ar | ea Code) | | | |
| Momo | | ı | Joh Tiller | - | | 0.00 | | • | | Tol Mo. | | |
| Name: | <u> </u> | | Job Title: | | | | | | | Tel. No. : | | |
| | Contractor: | | Address: | | | | | | T. i | Tel. No. : | | |
| Primary | Consultant: | | Address: | | | | | | | Tel. No. : | | |
| Lab: | | V. U.S.T. Information | Address: | | V 12 | | . 0 | ition | | Tel. No. : | | |
| | | | | Wate | er In | avatior Fre | ө | Notable | Odor or | VI. Additional Information Required | | |
| Tank No. | Size in Gallons | Tank Dimensions | Last Contents | Yes | ration No | Prod Yes | No. | Visible Soil C Yes | ontamination No | See reverse side of pink copy (owner's copy) for additional | | |
| 6 | 550 | 46"x74" | Waste Oil | | | | | | | information required by N.C DWQ in the written report and sketch. | | |
| 7 | 550 | 46''x74'' | Waste Oil | | | | | | | · | | |
| 8 | 550 | 46"x74" | Waste Oil | | | | | | | NOTE: If a release from the tank(s) has occurred, the site | | |
| | 70.° | | | | | | - | | | assessment portion of the tank closure must be conducted under | | |
| | | | | | | | | | | the supervision of a P.E. or L.G., | | |
| | | | | | | | -, | | | with all closure site assessment reports bearing the signature and | | |
| | | | | | | | | | | seal of the P.E. or L.G. | | |
| | | | VII. Check List | (Check | the a | ctivitie | s com | oleted) | | | | |
| PER | MANENT C | LOSURE (For Removir | ng or Abandoning-in-place | l | | 1 | | | | | | |
| Contact local fire marshal. Notify DWQ Regional Office before abandonment. Drain & flush piping into tank. Remove all product and residuals from tank. Excavate down to tank. Clean and inspect tank. Remove drop tube, fill pipe, gauge pipe, vapor recovery tank connections, submersible pumps and other tank fixtures. Purge tank of all product & flammable vapors. Cut one or more large holes in the tanks. Backfill the area. Date Tank(s) Permanently closed: 3/23/01. Date of Change-In-Service: ABANDONMENT IN PLACE Fill tank until material overflows tank opening. Disconnect and cap or remove vent line. Solid inert material used - specify: Clean builders sar | | | | | | | | | | | | |
| | | | VIII. Ce | ertificati | on (R | ead and | d Sian) | <u> </u> | | | | |
| docum | ents, and | | nave personally examir nquiry of those individu | ed and | am f | amiliar | with th | ne inform | | omitted in this and all attached he information, I believe that the | | |
| Print nar | ne and offici | al title of owner or owne | r's authorized representative |) | | 81gna | ture | . // | | Date Signed | | |
| | | | | | | /// | ight) | A R | ILM | ell 4-4-2001 | | |
| GW/U | ST-2 (Rev | . 10/96) | White Copy - Regiona | I Office | | Yello | w Copy | - Central C | | Pink Copy - Owner | | |

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APPENDIX B CHAIN-OF-CUSTODY RECORD